

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

Kerr-McGee Oil & Gas Onshore LP

GWA_Hoy_Water_Well

FID:705801 Reg:Vol. Freq.:SP

SGS Job Number: DA58476

Sampling Date: 09/11/23



Report to:

Fulcrum Energy Operating
112 High Street
Buffalo, WY 82834
tanya.cude@absarokasolutions.com; AnadarkoDataMngt@ghd.com;
joel.mason@absarokasolutions.com; jordan.fleming@absarokasolutions.com
ATTN: Tanya Cude

Total number of pages in report: 43



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable unless noted in the narrative, comments or footnotes.

Eric Hoffman

Client Service contact: Parna Payandeh 303-425-6021

Certifications: CO (CO00049), ND (R-027), UT (NELAP CO00049), LA (LA150028), TX (T104704511), WY (8TMS-L) HI (CO00049), NJ (CO011), NV (CO00049), AK (CO00049), CA (3076), and NC (08701)

This report shall not be reproduced, except in its entirety, without the written approval of SGS.
Test results relate only to samples analyzed.



September 28, 2023

Tanya Cude
Kerr-McGee Oil & Gas Onshore LP
112 High Street
Buffalo, WY 82834

Subject: Report Reissue for SGS Job: DA58476

Dear Tanya Cude,

The initial report did not include the QC results for Bromide, Chloride, Fluoride, and Sulfate. This reissued report is complete. Please accept our apologies for any inconvenience this may have caused you.

Any questions or concerns should be directed to the undersigned at 303-425-6021.

Sincerely,

A handwritten signature in black ink, appearing to read 'E. Hoffman', written over a light gray horizontal line.

Eric Hoffman
General Manager

SGS IS THE WORLD'S LEADING INSPECTION, VERIFICATION, TESTING AND CERTIFICATION COMPANY.

Table of Contents

-1-

Section 1: Sample Summary	4
Section 2: Case Narrative/Conformance Summary	5
Section 3: Summary of Hits	8
Section 4: Sample Results	9
4.1: DA58476-1: BW_HOY_260947 NWNW_33_3N_66W	10
4.2: DA58476-1A: BW_HOY_260947 NWNW_33_3N_66W	14
4.3: DA58476-1B: BW_HOY_260947 NWNW_33_3N_66W	15
4.4: DA58476-1F: BW_HOY_260947 NWNW_33_3N_66W	16
Section 5: Misc. Forms	17
5.1: Chain of Custody	18
Section 6: MS Volatiles - QC Data Summaries	21
6.1: Method Blank Summary	22
6.2: Blank Spike/Blank Spike Duplicate Summary	23
Section 7: GC Volatiles - QC Data Summaries	24
7.1: Method Blank Summary	25
7.2: Blank Spike/Blank Spike Duplicate Summary	27
Section 8: GC/LC Semi-volatiles - QC Data Summaries	29
8.1: Method Blank Summary	30
8.2: Blank Spike Summary	31
8.3: Matrix Spike/Matrix Spike Duplicate Summary	33
Section 9: Metals Analysis - QC Data Summaries	34
9.1: Prep QC MP38114: Ba,B,Ca,Fe,Mg,Mn,K,Se,Na,Sr	35
Section 10: General Chemistry - QC Data Summaries	39
10.1: Method Blank and Spike Results Summary	40
10.2: Duplicate Results Summary	41
10.3: Matrix Spike Results Summary	42
10.4: Matrix Spike Duplicate Results Summary	43

1

2

3

4

5

6

7

8

9

10



Sample Summary

Kerr-McGee Oil & Gas Onshore LP

Job No: DA58476

GWA_Hoy_Water_Well

Project No: FID:705801 Reg:Vol. Freq.:SP

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
---------------	----------------	---------	----------	-------------	------	------------------

This report contains results reported as ND = Not detected. The following applies:
Organics ND = Not detected above the MDL

DA58476-1	09/11/23	10:27	EF	09/12/23	AQ	Ground Water	BW_HOY_260947 NWNW_33_3N_66 W
DA58476-1A	09/11/23	10:27	EF	09/12/23	AQ	Ground Water	BW_HOY_260947 NWNW_33_3N_66 W
DA58476-1B	09/11/23	10:27	EF	09/12/23	AQ	Ground Water	BW_HOY_260947 NWNW_33_3N_66 W
DA58476-1F	09/11/23	10:27	EF	09/12/23	AQ	Groundwater Filtered	BW_HOY_260947 NWNW_33_3N_66 W

CASE NARRATIVE / CONFORMANCE SUMMARY

Client: Kerr-McGee Oil & Gas Onshore LP

Job No: DA58476

Site: GWA_Hoy_Water_Well

Report Date 9/27/2023 10:57:38 A

On 09/12/2023, 1 sample(s), 0 Trip Blank(s), and 0 Field Blank(s) were received at SGS North America Inc. (SGS) at a temperature of 2.5 °C. The samples were intact and properly preserved, unless noted below. An SGS Job Number of DA58476 was assigned to the project. The lab sample ID, client sample ID, and date of sample collection are detailed in the report's Results Summary.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

MS Volatiles By Method SW846 8260B

Matrix: AQ **Batch ID:** V5V3784

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

GC Volatiles By Method RSK175 MOD

Matrix: AQ **Batch ID:** GFK303

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- DA58476-1A: The pH of the sample was >2 at time of analysis.

GC Volatiles By Method SW846 8015D

Matrix: AQ **Batch ID:** GGA2777

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

GC/LC Semi-volatiles By Method SW846-8015D

Matrix: AQ **Batch ID:** OP24342

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) DA58476-1MS, DA58476-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Metals Analysis By Method EPA 200.8

Matrix: AQ **Batch ID:** MP38114

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) DA58125-2FMS, DA58125-2FMSD were used as the QC samples for the metals analysis.
- The matrix spike (MS) recovery(s) of Calcium, Sodium, Strontium are outside control limits. Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

General Chemistry By Method EPA 300.0

Matrix: AQ **Batch ID:** GP35082

- All samples were prepared within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) DA58464-2MS, DA58464-2MSD were used as the QC samples for the Nitrogen, Nitrate, Nitrogen, Nitrite, Nitrogen, Nitrate analysis.
- DA58476-1 for Nitrogen, Nitrite: Elevated detection limit due to matrix interference.
- DA58476-1 for Nitrogen, Nitrate: Elevated detection limit due to matrix interference.

Matrix: AQ **Batch ID:** R61730

- The data for EPA 300.0 meets quality control requirements.
- DA58476-1 for Nitrogen, Nitrate + Nitrite: Calculated as: (Nitrogen, Nitrate) + (Nitrogen, Nitrite)

General Chemistry By Method EPA 365.1

Matrix: AQ **Batch ID:** GP35093

- All samples were prepared within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) DA58476-1DUP, DA58476-1MS, DA58476-1MSD were used as the QC samples for the Phosphorus, Total analysis.

General Chemistry By Method HACH IRB-BART

Matrix: AQ **Batch ID:** MB1691

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) DA58340-1BDUP were used as the QC samples for the Iron-Related Bacteria analysis.

General Chemistry By Method HACH SLYM-BART

Matrix: AQ **Batch ID:** MB1690

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) DA58340-1BDUP were used as the QC samples for the Slime Forming Bacteria analysis.

General Chemistry By Method HACH SRB-BART

Matrix: AQ **Batch ID:** MB1692

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) DA58340-1BDUP were used as the QC samples for the Sulfate Reducing Bacteria analysis.

Summary of Hits

Job Number: DA58476
 Account: Kerr-McGee Oil & Gas Onshore LP
 Project: GWA_Hoy_Water_Well
 Collected: 09/11/23



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
---------------	------------------	-----------------	----	-----	-------	--------

DA58476-1 BW_HOY_260947 NWNW_33_3N_66W

Fluoride	1.3	0.50			mg/l	EPA 300.0
Chloride	93.0	2.5			mg/l	EPA 300.0
Bromide	0.87	0.25			mg/l	EPA 300.0
Sulfate	417	13			mg/l	EPA 300.0
Alkalinity, Bicarbonate as CaCO3	640	5.0			mg/l	SM 2320B-2011
Alkalinity, Total as CaCO3	640	5.0			mg/l	SM 2320B-2011
Cation Anion Balance	5.9				%	SM1030E-2011
Phosphorus, Total	0.034	0.010			mg/l	EPA 365.1
Solids, Total Dissolved	666	10			mg/l	SM 2540C-2011
Specific Conductivity	2310	1.0			umhos/cm	SM 2510B-2011
pH ^a	8.21				su	SM4500HB+ -2011/9040C
Specific Conductivity (Field)	2052.7	0.50			umhos/cm	FIELD
pH (Field)	7.92				su	FIELD
Temperature (Field)	18.6				Deg. C	FIELD
Turbidity	0.02				NTU	FIELD
Oxygen, Dissolved (Field)	0.07				mg/l	FIELD

DA58476-1A BW_HOY_260947 NWNW_33_3N_66W

Methane ^b	4.44	0.040	0.035	mg/l	RSK175 MOD
Ethane ^b	0.0141	0.0016	0.0010	mg/l	RSK175 MOD

DA58476-1B BW_HOY_260947 NWNW_33_3N_66W

Iron-Related Bacteria	2200	25		CFU/ml	HACH IRB-BART
Slime Forming Bacteria	< 500	500		CFU/ml	HACH SLYM-BART
Sulfate Reducing Bacteria	< 200	200		CFU/ml	HACH SRB-BART

DA58476-1F BW_HOY_260947 NWNW_33_3N_66W

Barium	0.0401	0.0020		mg/l	EPA 200.8
Boron	0.176	0.040		mg/l	EPA 200.8
Calcium	28.7	0.40		mg/l	EPA 200.8
Magnesium	6.50	0.10		mg/l	EPA 200.8
Manganese	0.147	0.0010		mg/l	EPA 200.8
Potassium	2.15	0.20		mg/l	EPA 200.8
Sodium	447	10		mg/l	EPA 200.8
Strontium	0.928	0.040		mg/l	EPA 200.8

(a) Analysis performed past recommended hold time.

(b) The pH of the sample was > 2 at time of analysis.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID: BW_HOY_260947 NWNW_33_3N_66W	Date Sampled: 09/11/23
Lab Sample ID: DA58476-1	Date Received: 09/12/23
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8260B	
Project: GWA_Hoy_Water_Well	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5V76813.D	1	09/13/23 00:24	MB	n/a	n/a	V5V3784
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.60	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
1330-20-7	Xylene (total)	ND	1.0	1.0	ug/l	
	m,p-Xylene	ND	1.0	0.96	ug/l	
95-47-6	o-Xylene	ND	1.0	0.60	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		70-130%
17060-07-0	1,2-Dichloroethane-D4	101%		70-130%
2037-26-5	Toluene-D8	101%		70-130%
460-00-4	4-Bromofluorobenzene	110%		70-130%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.1
4

Report of Analysis

Client Sample ID: BW_HOY_260947 NWNW_33_3N_66W Lab Sample ID: DA58476-1 Matrix: AQ - Ground Water Method: SW846 8015D Project: GWA_Hoy_Water_Well	Date Sampled: 09/11/23 Date Received: 09/12/23 Percent Solids: n/a
--	---

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GA62343.D	1	09/12/23 21:21	MB	n/a	n/a	GGA2777
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.050	0.040	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
120-82-1	1,2,4-Trichlorobenzene	117%		60-140%		

ND = Not detected RL = Reporting Limit E = Indicates value exceeds calibration range	MDL = Method Detection Limit J = Indicates an estimated value B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound
--	--

4.1
4

Report of Analysis

Client Sample ID: BW_HOY_260947 NWNW_33_3N_66W Lab Sample ID: DA58476-1 Matrix: AQ - Ground Water Method: SW846-8015D SW846 3510C Project: GWA_Hoy_Water_Well	Date Sampled: 09/11/23 Date Received: 09/12/23 Percent Solids: n/a
--	---

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FH067620.D	1	09/21/23 17:28	JB	09/17/23 10:00	OP24342	GFH23713
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	ND	0.19	0.18	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	81%		10-131%		

ND = Not detected RL = Reporting Limit E = Indicates value exceeds calibration range	MDL = Method Detection Limit J = Indicates an estimated value B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound
--	--

4.1
4

Report of Analysis

Client Sample ID: BW_HOY_260947 NWNW_33_3N_66W	Date Sampled: 09/11/23
Lab Sample ID: DA58476-1	Date Received: 09/12/23
Matrix: AQ - Ground Water	Percent Solids: n/a
Project: GWA_Hoy_Water_Well	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
300.0							
Fluoride	1.3	0.50	mg/l	5	09/12/23 15:06	MB	EPA 300.0
Chloride	93.0	2.5	mg/l	5	09/12/23 15:06	MB	EPA 300.0
Nitrogen, Nitrite ^a	< 0.020	0.020	mg/l	5	09/12/23 15:06	MB	EPA 300.0
Bromide	0.87	0.25	mg/l	5	09/12/23 15:06	MB	EPA 300.0
Nitrogen, Nitrate ^a	< 0.050	0.050	mg/l	5	09/12/23 15:06	MB	EPA 300.0
Sulfate	417	13	mg/l	25	09/12/23 15:15	MB	EPA 300.0
300.0 NO2 + NO3O							
Nitrogen, Nitrate + Nitrite ^b	< 0.070	0.070	mg/l	1	09/12/23 15:06	MB	EPA 300.0
Alkalinity, Bicarbonate as CaC	640	5.0	mg/l	1	09/19/23 12:00	JW	SM 2320B-2011
Alkalinity, Carbonate	< 5.0	5.0	mg/l	1	09/19/23 12:00	JW	SM 2320B-2011
Alkalinity, Total as CaCO3	640	5.0	mg/l	1	09/19/23 12:00	JW	SM 2320B-2011
Cation Anion Balance	5.9		%	1	09/22/23	MB	SM1030E-2011
Phosphorus, Total	0.034	0.010	mg/l	1	09/14/23 11:22	MB	EPA 365.1
Solids, Total Dissolved	666	10	mg/l	1	09/13/23 07:00	JW	SM 2540C-2011
Specific Conductivity	2310	1.0	umhos/cm	1	09/14/23 12:00	JW	SM 2510B-2011
pH ^c	8.21		su	1	09/14/23 12:30	JW	SM4500HB+ -2011/9040C

Field Parameters

Oxygen, Dissolved (Field)	0.07		mg/l	1	09/11/23 10:27	SUB	FIELD
Redox Potential Vs H2	-91.1		mv	1	09/11/23 10:27	SUB	FIELD
Specific Conductivity (Field)	2052.7	0.50	umhos/cm	1	09/11/23 10:27	SUB	FIELD
Temperature (Field)	18.6		Deg. C	1	09/11/23 10:27	SUB	FIELD
Turbidity	0.02		NTU	1	09/11/23 10:27	SUB	FIELD
pH (Field)	7.92		su	1	09/11/23 10:27	SUB	FIELD

- (a) Elevated detection limit due to matrix interference.
- (b) Calculated as: (Nitrogen, Nitrate) + (Nitrogen, Nitrite)
- (c) Analysis performed past recommended hold time.

RL = Reporting Limit

4.1
4

Report of Analysis

Client Sample ID: BW_HOY_260947 NWNW_33_3N_66W	Date Sampled: 09/11/23
Lab Sample ID: DA58476-1A	Date Received: 09/12/23
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: RSK175 MOD	
Project: GWA_Hoy_Water_Well	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	FK4164.D	1	09/18/23 14:49	MB	n/a	n/a	GFK303
Run #2 ^a	FK4165.D	50	09/18/23 14:56	MB	n/a	n/a	GFK303

Run #	Initial Volume	Headspace Volume	Volume Injected	Temperature
Run #1	39.0 ml	4.0 ml	500 ul	21.8 Deg. C
Run #2	39.0 ml	4.0 ml	500 ul	21.8 Deg. C

Methane, Ethane and Propane

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	4.44 ^b	0.040	0.035	mg/l	
74-84-0	Ethane	0.0141	0.0016	0.0010	mg/l	
74-98-6	Propane	ND	0.0022	0.0017	mg/l	

(a) The pH of the sample was > 2 at time of analysis.

(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.2
4

Report of Analysis

Client Sample ID: BW_HOY_260947 NWNW_33_3N_66W	Date Sampled: 09/11/23
Lab Sample ID: DA58476-1B	Date Received: 09/12/23
Matrix: AQ - Ground Water	Percent Solids: n/a
Project: GWA_Hoy_Water_Well	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Iron-Related Bacteria	2200	25	CFU/ml	1	09/15/23 08:00	CS	HACH IRB-BART
Slime Forming Bacteria	< 500	500	CFU/ml	1	09/15/23 08:00	CS	HACH SLYM-BART
Sulfate Reducing Bacteria	< 200	200	CFU/ml	1	09/15/23 08:00	CS	HACH SRB-BART

RL = Reporting Limit

4.3
4

Report of Analysis

Client Sample ID: BW_HOY_260947 NWNW_33_3N_66W	Date Sampled: 09/11/23
Lab Sample ID: DA58476-1F	Date Received: 09/12/23
Matrix: AQ - Groundwater Filtered	Percent Solids: n/a
Project: GWA_Hoy_Water_Well	

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Barium	0.0401	0.0020	mg/l	1	09/13/23	09/18/23 DU	EPA 200.8 ¹	EPA 200.8 ²
Boron	0.176	0.040	mg/l	1	09/13/23	09/18/23 DU	EPA 200.8 ¹	EPA 200.8 ²
Calcium	28.7	0.40	mg/l	1	09/13/23	09/18/23 DU	EPA 200.8 ¹	EPA 200.8 ²
Iron	< 0.020	0.020	mg/l	1	09/13/23	09/18/23 DU	EPA 200.8 ¹	EPA 200.8 ²
Magnesium	6.50	0.10	mg/l	1	09/13/23	09/18/23 DU	EPA 200.8 ¹	EPA 200.8 ²
Manganese	0.147	0.0010	mg/l	1	09/13/23	09/18/23 DU	EPA 200.8 ¹	EPA 200.8 ²
Potassium	2.15	0.20	mg/l	1	09/13/23	09/18/23 DU	EPA 200.8 ¹	EPA 200.8 ²
Selenium	< 0.00040	0.00040	mg/l	1	09/13/23	09/18/23 DU	EPA 200.8 ¹	EPA 200.8 ²
Sodium	447	10	mg/l	20	09/13/23	09/18/23 DU	EPA 200.8 ¹	EPA 200.8 ²
Strontium	0.928	0.040	mg/l	2	09/13/23	09/18/23 DU	EPA 200.8 ¹	EPA 200.8 ²

(1) Instrument QC Batch: MA17110

(2) Prep QC Batch: MP38114

RL = Reporting Limit

4.4
4

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody



CHAIN OF CUSTODY

4036 Youngfield Street, Wheat Ridge, CO 80033
TEL: 303-425-6021 FAX: 303-425-6854
www.acctest.com

Bottle Order Control #
FED-EX Tracking #
SGS Quote #
SGS Job # DA58476

Client / Reporting Information, Project Information, Requested Analysis, Matrix Codes, Collection, Data Deliverable Information, Turnaround Time, Sample Custody, and Retention/Release sections.

5.1
5

DA58476: Chain of Custody

Page 1 of 3



SGS Sample Receipt Summary

Job Number: DA58476

Client: ABSAROKA

Project: GWA

Date / Time Received: 9/12/2023 1:00:00 PM

Delivery Method: co

Airbill #s: _____

Cooler Temps (Initial/Adjusted): #1: (2.5/2.5):

Cooler Security

Y or N

Y or N

- | | | | | | |
|---------------------------|-------------------------------------|--------------------------|-----------------------|-------------------------------------|--------------------------|
| 1. Custody Seals Present: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 3. COC Present: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Custody Seals Intact: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 4. Smpl Dates/Time OK | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Cooler Temperature

Y or N

- | | | |
|----------------------------|-------------------------------------|--------------------------|
| 1. Temp criteria achieved: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Thermometer ID: | <u>IR Gun;</u> | |
| 3. Cooler media: | <u>Ice (Bag)</u> | |
| 4. No. Coolers: | <u>1</u> | |

Quality Control Preservation

Y or N N/A

- | | | | |
|---------------------------------|-------------------------------------|--------------------------|--------------------------|
| 1. Trip Blank present / cooler: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Trip Blank listed on COC: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Samples preserved properly: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 4. VOCs headspace free: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Comments

Sample Integrity - Documentation

Y or N

- | | | |
|--|-------------------------------------|--------------------------|
| 1. Sample labels present on bottles: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Container labeling complete: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Sample container label / COC agree: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Sample Integrity - Condition

Y or N

- | | | |
|----------------------------------|-------------------------------------|--------------------------|
| 1. Sample recvd within HT: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. All containers accounted for: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Condition of sample: | <u>Intact</u> | |

Sample Integrity - Instructions

Y or N N/A

- | | | | |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 1. Analysis requested is clear: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 2. Bottles received for unspecified tests | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 3. Sufficient volume recvd for analysis: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 4. Compositing instructions clear: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5. Filtering instructions clear: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

5.1
5

DA58476: Chain of Custody

Page 2 of 3

Problem Resolution

Job Number: DA58476

Page 2 of 2

CSR: _____

Response Date: _____

Response:

5.1

5

DA58476: Chain of Custody
Page 3 of 3

MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: DA58476
 Account: ANADACOD Kerr-McGee Oil & Gas Onshore LP
 Project: GWA_Hoy_Water_Well

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5V3784-MB	5V76793.D	1	09/12/23	MB	n/a	n/a	V5V3784

The QC reported here applies to the following samples:

Method: SW846 8260B

DA58476-1

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.60	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
	m,p-Xylene	ND	1.0	0.96	ug/l	
95-47-6	o-Xylene	ND	1.0	0.60	ug/l	
1330-20-7	Xylene (total)	ND	1.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Results	Limits
1868-53-7	Dibromofluoromethane	96%	70-130%
17060-07-0	1,2-Dichloroethane-D4	97%	70-130%
2037-26-5	Toluene-D8	100%	70-130%
460-00-4	4-Bromofluorobenzene	106%	70-130%

6.1.1
6

Blank Spike/Blank Spike Duplicate Summary

Job Number: DA58476
 Account: ANADACOD Kerr-McGee Oil & Gas Onshore LP
 Project: GWA_Hoy_Water_Well

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5V3784-BS	5V76790A.D	1	09/12/23	MB	n/a	n/a	V5V3784
V5V3784-BSD	5V76791.D	1	09/12/23	MB	n/a	n/a	V5V3784

The QC reported here applies to the following samples:

Method: SW846 8260B

DA58476-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	50	50.3	101	49.8	100	1	70-130/30
100-41-4	Ethylbenzene	50	52.3	105	51.7	103	1	70-130/30
108-88-3	Toluene	50	50.2	100	49.6	99	1	70-130/30
	m,p-Xylene	100	107	107	107	107	0	70-130/30
95-47-6	o-Xylene	50	52.2	104	52.1	104	0	70-130/30
1330-20-7	Xylene (total)	150	159	106	159	106	0	70-130/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	94%	96%	70-130%
17060-07-0	1,2-Dichloroethane-D4	98%	99%	70-130%
2037-26-5	Toluene-D8	98%	98%	70-130%
460-00-4	4-Bromofluorobenzene	94%	95%	70-130%

* = Outside of Control Limits.

GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: DA58476
Account: ANADACOD Kerr-McGee Oil & Gas Onshore LP
Project: GWA_Hoy_Water_Well

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGA2777-MB	GA62337.D	1	09/12/23	MB	n/a	n/a	GGA2777

The QC reported here applies to the following samples:

Method: SW846 8015D

DA58476-1

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.050	0.040	mg/l	

CAS No.	Surrogate Recoveries	Limits
120-82-1	1,2,4-Trichlorobenzene	123% 60-140%

7.1.1
7

Method Blank Summary

Job Number: DA58476
Account: ANADACOD Kerr-McGee Oil & Gas Onshore LP
Project: GWA_Hoy_Water_Well

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GFK303-MB	FK4161.D	1	09/18/23	MB	n/a	n/a	GFK303

The QC reported here applies to the following samples:

Method: RSK175 MOD

DA58476-1A

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	ND	0.00080	0.00070	mg/l	
74-84-0	Ethane	ND	0.0016	0.0010	mg/l	
74-98-6	Propane	ND	0.0022	0.0017	mg/l	

7.1.2

7

Blank Spike/Blank Spike Duplicate Summary

Job Number: DA58476
 Account: ANADACOD Kerr-McGee Oil & Gas Onshore LP
 Project: GWA_Hoy_Water_Well

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGA2777-BS	GA62334.D	1	09/12/23	MB	n/a	n/a	GGA2777
GGA2777-BSD	GA62335.D	1	09/12/23	MB	n/a	n/a	GGA2777

The QC reported here applies to the following samples:

Method: SW846 8015D

DA58476-1

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	BSD mg/l	BSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	2.2	1.80	82	1.79	81	1	64-130/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
120-82-1	1,2,4-Trichlorobenzene	126%	127%	60-140%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: DA58476
 Account: ANADACOD Kerr-McGee Oil & Gas Onshore LP
 Project: GWA_Hoy_Water_Well

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GFK303-BS	FK4162.D	10	09/18/23	MB	n/a	n/a	GFK303
GFK303-BSD	FK4163.D	10	09/18/23	MB	n/a	n/a	GFK303

The QC reported here applies to the following samples:

Method: RSK175 MOD

DA58476-1A

CAS No.	Compound	Spike	BSP	BSP	BSD	BSD	RPD	Limits
		mg/l	mg/l	%	mg/l	%		Rec/RPD
74-82-8	Methane	0.512	0.598	117	0.607	119	1	70-135/30
74-84-0	Ethane	0.923	1.17	127	1.19	129	2	70-147/30
74-98-6	Propane	1.38	1.68	122	1.70	123	1	70-140/30

* = Outside of Control Limits.

7.2.2
7

GC/LC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: DA58476
Account: ANADACOD Kerr-McGee Oil & Gas Onshore LP
Project: GWA_Hoy_Water_Well

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP24342-MB	FH067612.D	1	09/21/23	JB	09/17/23	OP24342	GFH23713

The QC reported here applies to the following samples:

Method: SW846-8015D

DA58476-1

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	ND	0.20	0.19	mg/l	

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	82% 10-131%

8.1.1

8

Blank Spike Summary

Job Number: DA58476
 Account: ANADACOD Kerr-McGee Oil & Gas Onshore LP
 Project: GWA_Hoy_Water_Well

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP24342-BS1	FH067613.D	1	09/21/23	JB	09/17/23	OP24342	GFH23713

The QC reported here applies to the following samples:

Method: SW846-8015D

DA58476-1

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
	TPH-DRO (C10-C28)	5	4.53	91	20-130

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	90%	10-131%

8.2.1

8

* = Outside of Control Limits.

Blank Spike Summary

Job Number: DA58476
Account: ANADACOD Kerr-McGee Oil & Gas Onshore LP
Project: GWA_Hoy_Water_Well

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP24342-BS2	FH067616.D	1	09/21/23	JB	09/17/23	OP24342	GFH23713

The QC reported here applies to the following samples:

Method: SW846-8015D

DA58476-1

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
---------	----------	---------------	-------------	----------	--------

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	93%	10-131%

8.2.2
8

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: DA58476
 Account: ANADACOD Kerr-McGee Oil & Gas Onshore LP
 Project: GWA_Hoy_Water_Well

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP24342-MS1	FH067614.D	1	09/21/23	JB	09/17/23	OP24342	GFH23713
OP24342-MSD1	FH067615.D	1	09/21/23	JB	09/17/23	OP24342	GFH23713
DA58476-1	FH067620.D	1	09/21/23	JB	09/17/23	OP24342	GFH23713

The QC reported here applies to the following samples:

Method: SW846-8015D

DA58476-1

CAS No.	Compound	DA58476-1 mg/l	Spike Q mg/l	MS mg/l	MS %	Spike mg/l	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	TPH-DRO (C10-C28)	ND	10	8.54	85	10	7.46	75	14	20-130/30

CAS No.	Surrogate Recoveries	MS	MSD	DA58476-1	Limits
84-15-1	o-Terphenyl	83%	79%	81%	10-131%

8.3.1
8

* = Outside of Control Limits.

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: DA58476
Account: ANADACOD - Kerr-McGee Oil & Gas Onshore LP
Project: GWA_Hoy_Water_Well

QC Batch ID: MP38114
Matrix Type: AQUEOUS

Methods: EPA 200.8
Units: ug/l

Prep Date: 09/13/23

Metal	RL	IDL	MDL	MB raw	final
Aluminum	50	.52	13		
Antimony	0.40	.01	.3		
Arsenic	0.20	.05	.05		
Barium	2.0	.096	.25	-0.0063	<2.0
Beryllium	0.20	.077	.1		
Boron	40	18	20	1.7	<40
Cadmium	0.10	.03	.04		
Calcium	400	25	100	2.0	<400
Chromium	2.0	.087	.25		
Cobalt	0.20	.04	.05		
Copper	2.0	.05	.81		
Iron	20	1.6	10	2.0	<20
Lead	0.50	.094	.13		
Magnesium	100	10	25	8.2	<100
Manganese	1.0	.079	.51	0.053	<1.0
Molybdenum	1.0	.037	.27		
Nickel	2.0	.098	.35		
Phosphorus	60	7.6	25		
Potassium	200	2	50	-21	<200
Selenium	0.40	.05	.1	0.0048	<0.40
Silver	0.10	.0081	.025		
Sodium	500	10	130	0.94	<500
Strontium	20	.1	5	0.00045	<20
Thallium	0.20	.032	.05		
Tin	10	.22	2.5		
Titanium	2.0	.05	.37		
Uranium	0.20	.015	.05		
Vanadium	1.0	.14	.2		
Zinc	10	.05	2.1		

Associated samples MP38114: DA58476-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

9.1.1
9

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: DA58476
 Account: ANADACOD - Kerr-McGee Oil & Gas Onshore LP
 Project: GWA_Hoy_Water_Well

QC Batch ID: MP38114
 Matrix Type: AQUEOUS

Methods: EPA 200.8
 Units: ug/l

Prep Date: 09/13/23

Metal	DA58125-2F Original MS		Spike ICPMS5	% Rec	QC Limits
Aluminum					
Antimony					
Arsenic	anr				
Barium	42.1	448	400	101.5	70-130
Beryllium					
Boron	305	729	400	106.0	70-130
Cadmium	anr				
Calcium	119000	133000	5000	280.0(a)	70-130
Chromium	anr				
Cobalt					
Copper	anr				
Iron	20.7	997	1000	97.6	70-130
Lead	anr				
Magnesium	32900	36900	5000	80.0	70-130
Manganese	14.9	213	200	99.1	70-130
Molybdenum	anr				
Nickel	anr				
Phosphorus					
Potassium	10300	14000	5000	74.0	70-130
Selenium	4.6	205	200	100.2	70-130
Silver	anr				
Sodium	84000	95100	5000	222.0(a)	70-130
Strontium	1290	1430	100	140.0(a)	70-130
Thallium					
Tin					
Titanium					
Uranium	anr				
Vanadium					
Zinc	anr				

Associated samples MP38114: DA58476-1F

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

(a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: DA58476
 Account: ANADACOD - Kerr-McGee Oil & Gas Onshore LP
 Project: GWA_Hoy_Water_Well

QC Batch ID: MP38114
 Matrix Type: AQUEOUS

Methods: EPA 200.8
 Units: ug/l

Prep Date: 09/13/23

Metal	DA58125-2F Original MSD		SpikeLot ICPMS5	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic	anr					
Barium	42.1	443	400	100.2	1.1	20
Beryllium						
Boron	305	749	400	111.0	2.7	20
Cadmium	anr					
Calcium	119000	130000	5000	220.0(a)	2.3	20
Chromium	anr					
Cobalt						
Copper	anr					
Iron	20.7	1060	1000	103.9	6.1	20
Lead	anr					
Magnesium	32900	37700	5000	96.0	2.1	20
Manganese	14.9	224	200	104.6	5.0	20
Molybdenum	anr					
Nickel	anr					
Phosphorus						
Potassium	10300	14000	5000	74.0	0.0	20
Selenium	4.6	209	200	102.2	1.9	20
Silver	anr					
Sodium	84000	99500	5000	310.0(a)	4.5	20
Strontium	1290	1470	100	180.0(a)	5.6	20
Thallium						
Tin						
Titanium						
Uranium	anr					
Vanadium						
Zinc	anr					

Associated samples MP38114: DA58476-1F

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

(a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: DA58476
 Account: ANADACOD - Kerr-McGee Oil & Gas Onshore LP
 Project: GWA_Hoy_Water_Well

QC Batch ID: MP38114
 Matrix Type: AQUEOUS

Methods: EPA 200.8
 Units: ug/l

Prep Date: 09/13/23

Metal	BSP Result	SpikeLot ICPMS5	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic	anr			
Barium	406	400	101.5	85-115
Beryllium				
Boron	436	400	109.0	85-115
Cadmium	anr			
Calcium	4870	5000	97.4	85-115
Chromium	anr			
Cobalt				
Copper	anr			
Iron	1030	1000	103.0	85-115
Lead	anr			
Magnesium	4650	5000	93.0	85-115
Manganese	209	200	104.5	85-115
Molybdenum	anr			
Nickel	anr			
Phosphorus				
Potassium	4650	5000	93.0	85-115
Selenium	204	200	102.0	85-115
Silver	anr			
Sodium	4570	5000	91.4	85-115
Strontium	101	100	101.0	85-115
Thallium				
Tin				
Titanium				
Uranium	anr			
Vanadium				
Zinc	anr			

Associated samples MP38114: DA58476-1F

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

9.1.3
 9

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: DA58476
Account: ANADACOD - Kerr-McGee Oil & Gas Onshore LP
Project: GWA_Hoy_Water_Well

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Alkalinity, Bicarbonate as CaC	GN61343	5.0	0.0	mg/l	100	100	100.0	90-110%
Alkalinity, Carbonate	GN61344	5.0	0.0	mg/l	100	100	100.0	90-110%
Alkalinity, Total as CaCO3	GN61342	5.0	0.0	mg/l	100	100	100.0	90-110%
Bromide	GP35082/GN61291	0.050	0.0	mg/l	0.5	0.527	105.4	90-110%
Chloride	GP35082/GN61291	0.50	0.0	mg/l	5	5.05	101.0	90-110%
Fluoride	GP35082/GN61291	0.10	0.0	mg/l	1	1.01	101.0	90-110%
Iron-Related Bacteria	MB1691	25	<25	CFU/ml				
Nitrogen, Nitrate	GP35082/GN61291	0.010	0.0	mg/l	0.1	0.105	105.0	90-110%
Nitrogen, Nitrite	GP35082/GN61291	0.0040	0.0	mg/l	0.05	0.0528	105.6	90-110%
Phosphorus, Total	GP35093/GN61304	0.010	0.0	mg/l	0.2	0.198	99.0	90-110%
Slime Forming Bacteria	MB1690	500	<500	CFU/ml				
Solids, Total Dissolved	GN61296	10	0.0	mg/l	250	249	99.6	90-110%
Specific Conductivity	GP35091/GN61302			umhos/cm	10000	1070	107.4	90-110%
Sulfate	GP35082/GN61291	0.50	0.0	mg/l	5	5.17	103.4	90-110%
Sulfate Reducing Bacteria	MB1692	200	<200	CFU/ml				

Associated Samples:

Batch MB1690: DA58476-1B
Batch MB1691: DA58476-1B
Batch MB1692: DA58476-1B
Batch GN61296: DA58476-1
Batch GN61342: DA58476-1
Batch GN61343: DA58476-1
Batch GN61344: DA58476-1
Batch GP35082: DA58476-1
Batch GP35091: DA58476-1
Batch GP35093: DA58476-1
(*) Outside of QC limits

10.1
10

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: DA58476
Account: ANADACOD - Kerr-McGee Oil & Gas Onshore LP
Project: GWA_Hoy_Water_Well

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Alkalinity, Total as CaCO3	GN61342	DA58468-2	mg/l	180	180	0.0	0-20%
Iron-Related Bacteria	MB1691	DA58340-1B	CFU/ml	<25	<25	0.0	0-%
Phosphorus, Total	GP35093/GN61304	DA58476-1	mg/l	0.034	0.033	3.0	0-20%
Slime Forming Bacteria	MB1690	DA58340-1B	CFU/ml	<500	<500	0.0	0-%
Specific Conductivity	GP35091/GN61302	DA58477-1	umhos/cm	1440	1440	0.3	0-20%
Sulfate Reducing Bacteria	MB1692	DA58340-1B	CFU/ml	<200	<200	0.0	0-%

Associated Samples:

Batch MB1690: DA58476-1B

Batch MB1691: DA58476-1B

Batch MB1692: DA58476-1B

Batch GN61342: DA58476-1

Batch GP35091: DA58476-1

Batch GP35093: DA58476-1

(*) Outside of QC limits

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: DA58476
Account: ANADACOD - Kerr-McGee Oil & Gas Onshore LP
Project: GWA_Hoy_Water_Well

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Alkalinity, Total as CaCO3	GN61342	DA58468-2	mg/l	180	100	285	105.0	80-120%
Bromide	GP35082/GN61291	DA58464-2	mg/l	0.63 U	12.5	12.8	102.4	80-120%
Bromide	GP35082/GN61291	DA58464-2	mg/l	0.13 U	12.5	12.8	102.4	80-120%
Chloride	GP35082/GN61291	DA58464-2	mg/l	52.1	125	179	103.4	80-120%
Chloride	GP35082/GN61291	DA58464-2	mg/l	49.8	125	179	103.4	80-120%
Fluoride	GP35082/GN61291	DA58464-2	mg/l	0.25	25	24.1	96.4	80-120%
Fluoride	GP35082/GN61291	DA58464-2	mg/l	1.3 U	25	24.1	96.4	80-120%
Nitrogen, Nitrate	GP35082/GN61291	DA58464-2	mg/l	9.7	2.5	12.7	120.0	80-120%
Nitrogen, Nitrite	GP35082/GN61291	DA58464-2	mg/l	0.018	1.25	1.3	102.6	80-120%
Phosphorus, Total	GP35093/GN61304	DA58476-1	mg/l	0.034	0.2	0.24	103.0	90-110%
Sulfate	GP35082/GN61291	DA58464-2	mg/l	28.1	125	154	100.7	80-120%
Sulfate	GP35082/GN61291	DA58464-2	mg/l	27.3	125	154	100.7	80-120%

Associated Samples:

Batch GN61342: DA58476-1

Batch GP35082: DA58476-1

Batch GP35093: DA58476-1

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

MATRIX SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: DA58476
Account: ANADACOD - Kerr-McGee Oil & Gas Onshore LP
Project: GWA_Hoy_Water_Well

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit
Alkalinity, Total as CaCO3	GN61342	DA58468-2	mg/l	180	100	290	1.7	20%
Bromide	GP35082/GN61291	DA58464-2	mg/l	0.63 U	12.5	12.8	0.0	20%
Bromide	GP35082/GN61291	DA58464-2	mg/l	0.13 U	12.5	12.8	0.0	20%
Chloride	GP35082/GN61291	DA58464-2	mg/l	52.1	125	179	0.0	20%
Chloride	GP35082/GN61291	DA58464-2	mg/l	49.8	125	179	0.0	20%
Fluoride	GP35082/GN61291	DA58464-2	mg/l	0.25	25	24.2	0.4	20%
Fluoride	GP35082/GN61291	DA58464-2	mg/l	1.3 U	25	24.2	0.4	20%
Nitrogen, Nitrate	GP35082/GN61291	DA58464-2	mg/l	9.7	2.5	12.7	0.0	20%
Nitrogen, Nitrite	GP35082/GN61291	DA58464-2	mg/l	0.018	1.25	1.3	0.0	20%
Phosphorus, Total	GP35093/GN61304	DA58476-1	mg/l	0.034	0.2	0.24	0.0	20%
Sulfate	GP35082/GN61291	DA58464-2	mg/l	28.1	125	155	0.6	20%
Sulfate	GP35082/GN61291	DA58464-2	mg/l	27.3	125	155	0.6	20%

Associated Samples:

Batch GN61342: DA58476-1

Batch GP35082: DA58476-1

Batch GP35093: DA58476-1

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

10.4
10